

# Q<sup>TM</sup> 431

## 31 BAND GRAPHIC EQUALIZER



### OPERATING GUIDE





Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**CAUTION:** Risk of electrical shock – DO NOT OPEN!

**CAUTION:** To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

**WARNING:** To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings.



Este símbolo tiene el propósito de alertar al usuario de la presencia de "(voltaje) peligroso" que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto.

**PRECAUCION:** Riesgo de corrientazo – No abra.

**PRECAUCION:** Para disminuir el riesgo de corrientazo, no abra la cubierta. No hay piezas adentro que el usuario pueda reparar. Deje todo mantenimiento a los técnicos calificados.

**ADVERTENCIA:** Para evitar corrientazos o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato. Antes de usar este aparato, lea más advertencias en la guía de operación.



Ce symbole est utilisé pour indiquer à l'utilisateur la présence à l'intérieur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions sur l'utilisation et l'entretien (service) de l'appareil dans la littérature accompagnant le produit.

**ATTENTION:** Risques de choc électrique – NE PAS OUVRIR!

**ATTENTION:** Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien à un personnel qualifié.

**AVERTISSEMENT:** Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplémentaires situés dans le guide.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

**VORSICHT:** Risiko – Elektrischer Schlag! Nicht öffnen!

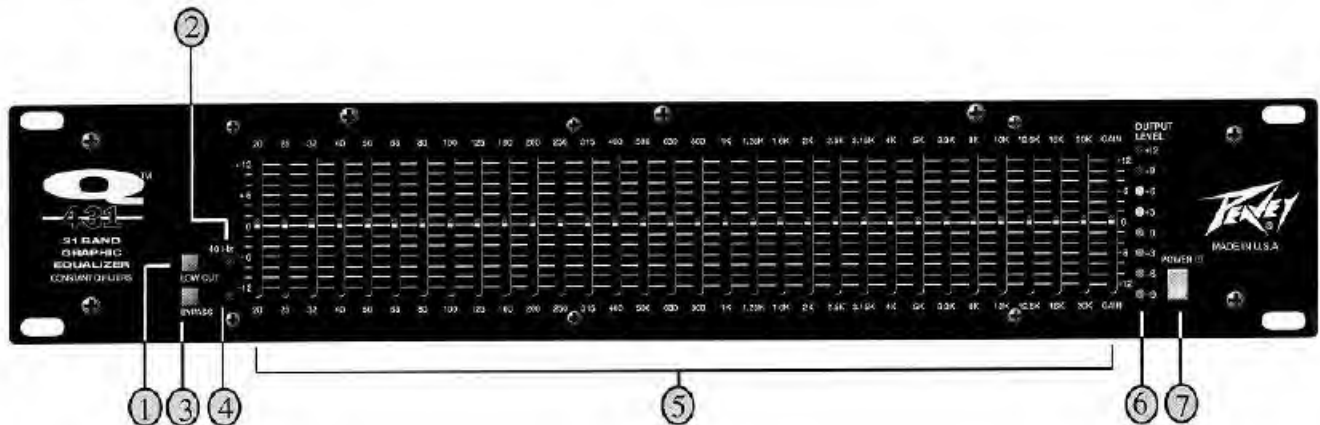
**VORSICHT:** Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

**ACHTUNG:** Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

# ENGLISH

## Q™ 431

### FRONT PANEL:



### Operation Note

This equalizer is designed to provide room equalization, feedback control, and system tone control. No amount of equalization will correct an acoustically bad room/mic/speaker arrangement or completely correct the response of a poor loudspeaker.

Always begin with all sliders in the "0" position. Avoid excessively cutting large segments of the audio passband, which would limit the system's dynamic range. Exercise caution when attempting to boost equalization below cut-off of the speaker system. Typical sound reinforcement enclosures are not designed for 20 Hz performance and transducer damage could result.

### LOW CUT (1):

Provides high pass filtering at 40 Hz in the "in" position. Low frequency roll off is at 12 dB per octave.

### LOW CUT LED (2):

With the Low Cut switch in the "in" position, this LED will illuminate indicating a low frequency roll off at 12 dB per octave at 40 Hz.

### BYPASS (3):

In bypass mode (switch in), the input signal is routed directly to the output and is unaffected by all front panel controls except the low cut filter.

### BYPASS LED (4):

This LED will illuminate when the Bypass switch is in the "in" position, indicating that the EQ and gain controls are bypassed.

**EQUALIZER SECTION (5):**

31-bands of 1/3 octave filters. The filters are constant "Q" devices, located at ISO center frequencies. Effective equalization range is from 20 Hz to 20 kHz. Maximum cut or boost per frequency is 12 dB.

**LED LEVEL METER (6):**

This multicolored LED ladder indicates output level.

**POWER SWITCH (7):**

Used to turn AC mains power on or off.

**REAR PANEL:****OUTPUT (8):**

A 1/4" tip-ring-sleeve (stereo) jack provides balanced output when used with stereo (TRS) 1/4" plugs and 2-conductor shielded cables. When used with a mono 1/4" phone plug, the output is unbalanced.

**INPUT (9):**

A 1/4" tip-ring-sleeve (stereo) jack provides balanced inputs when used with stereo (TRS) 1/4" plugs and 2-conductor shielded cables. When used with a mono 1/4" phone plug, the input is unbalanced.

## SPECIFICATIONS

**All specifications are typical unless otherwise noted.**

0 dBV=1 Volt

All specifications are referenced to nominal output level

(0 dBV) unless otherwise stated

All measurements are wideband 20 Hz to 20 kHz unless otherwise stated

**NOTE: All specs measured at 1 V RMS input and unbalanced output. All sliders at mid position, all switches out unless otherwise noted.**

**Frequency Response:**

±1 dB 20 Hz to 20 kHz

**Distortion:**

.005% 20 Hz to 20 kHz

**Input Impedance:**

Balanced 20 k ohms (Equal impedances to ground)

**Output Impedance:**

330 ohms

**Maximum Input Level:**

+18 dBV (8 V RMS)

**Maximum Output Level:**

+18 dBV (8 V RMS)

**Nominal Input Level:**

0 dBV (1 V RMS)

**Nominal Output Level:**

0 dBV (1 V RMS)

**Input Headroom:**

Nominal 18 dB

**Output Headroom:**

18 dB

**Output Noise:**

EQ in bypass: -101 dBV

EQ in, all flat: -95 dBV

**Filter Frequencies:**

20, 25, 32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1k, 1.25k, 1.6k, 2k, 2.5k, 3.15k, 4k, 5k, 6.3k, 8k, 10k, 12.5k, 16k, and 20k.

**Filter Q:**

4.77

**Maximum Boost & Cut Filter:**

±12 dB

**Maximum Boost & Cut Gain:**

(wideband gain)

±12 dB

**Low Cut Filter:**

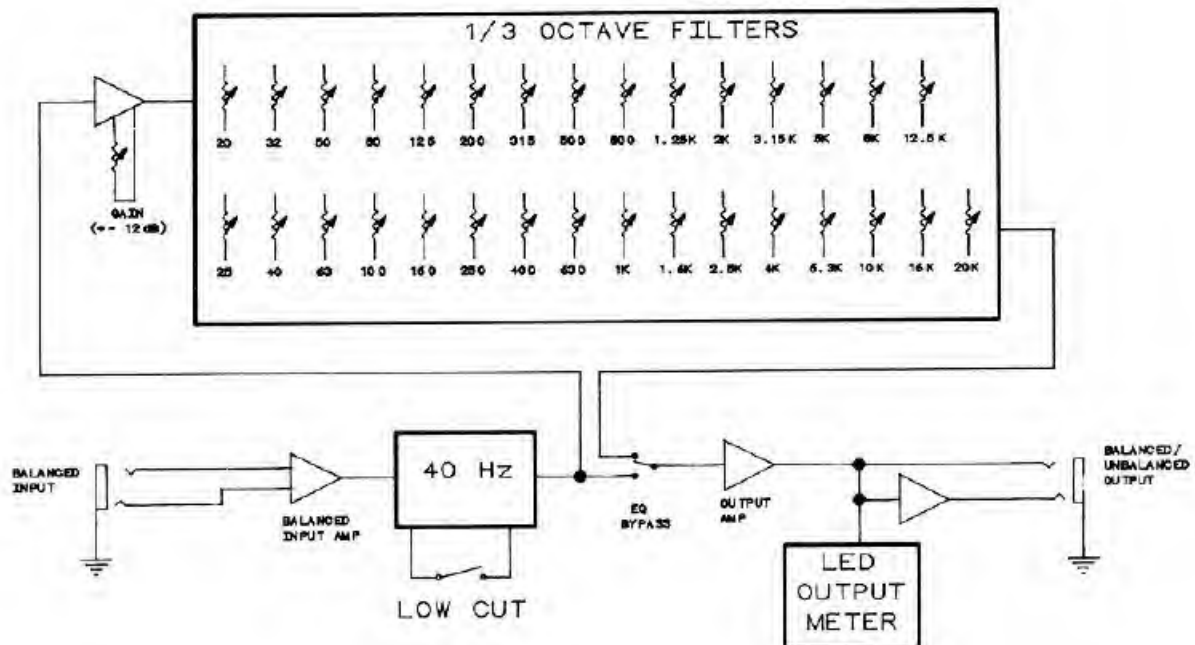
40 Hz



Due to our efforts for constant improvements,  
features and specifications listed herein are subject to change without notice.

## Block Diagram

This block diagram shows the signal path within the unit. In order to thoroughly understand the unit's functions, please study the block diagram carefully.





# ESPAÑOL

**Consulte los diagramas del panel  
delantero en la sección de inglés de este manual**

## **Nota de operación**

Este ecualizador está diseñado para proporcionar ecualización de sala, control de retroalimentación y control de tono del sistema. Ninguna cantidad de ecualización corregirá una mala disposición de sala, micrófonos o altavoces, ni corregirá por completo la respuesta de un mal altavoz.

Siempre comienza con los controles deslizantes en la posición "0". Evita cortar excesivamente grandes segmentos de la banda de paso de audio, lo cual puede limitar la gama dinámica del sistema. Sé precavido cuando intentes reforzar la ecualización por debajo de la frecuencia de corte del sistema de altavoces. Las cajas acústicas de refuerzo de sonido típicas no están diseñadas para un rendimiento a 20 Hz y pueden resultar dañados los transductores.

## **TABLERO DELANTERO:**

### **LOW CUT (Corte de graves) (1):**

Proporciona un filtrado de paso grave a los 40 Hz en la posición "in". El redondeado de baja frecuencia está en 12 dB por octava.

### **LOW CUT LED (Indicador LED de corte de graves) (2):**

Con el interruptor de corte de graves en la posición "in", este indicador LED se encenderá indicando un redondeado de frecuencias graves en 12 dB por octava a los 40 Hz.

### **BYPASS (Desvío) (3):**

En modo de desvío (interruptor en "in"), la señal de entrada es dirigida directamente a la salida y no es afectada por ninguno de los controles del tablero delantero con excepción del filtro de corte de graves.

### **BYPASS LED (Indicador led de desvío) (4):**

Este indicador LED se encenderá cuando el interruptor de paso continuo esté en la posición de "in", indicando que el ecualizador y los controles de ganancia están fuera de circuito.

### **EQUALIZER SECTION (Sección de ecualizador) (5):**

31 bandas de filtros de 1/3 de octava. Los filtros son dispositivos de constante "Q" localizados en las frecuencias centrales ISO. La gama efectiva de ecualización abarca desde 20 Hz a 20 kHz. El corte o refuerzo máximos por frecuencia es de 12 dB.

### **LED LEVEL METER (Medidor de nivel con indicadores LED) (6):**

Esta escala de indicadores LED de múltiples colores indica el nivel de salida

### **POWER SWITCH (Interruptor de encendido) (7):**

Se usa para encender o apagar la alimentación de CA.

### **TABLERO TRASERO:**



### **OUTPUT (Salida) (8):**

Un enchufe de 1/4" (6,35 mm) de (tres vías) punta, anillo y funda (estéreo) proporciona una salida balanceada cuando se usa con clavijas de conexión de audio estéreo (TRS) de 1/4" (6,35 mm) y cable blindado de dos conductores. La salida no es balanceada cuando se usa una clavija de conexión de audio de 1/4" (6,35 mm) monoaural.

### **INPUT (Entrada) (9):**

Un enchufe de 1/4" (6,35 mm) de (tres vías) punta, anillo y funda (estéreo) proporciona entradas balanceadas cuando se usa con clavijas de conexión de audio estéreo (TRS) de 1/4" (6,35 mm) y cable blindado de dos conductores. La entrada no es balanceada cuando se usa una clavija de conexión de audio de 1/4" (6,35 mm) monoaural.



# FRANCAIS

**Veillez vous référer au "front panel art"  
situé dans la section en langue anglaise de ce manuel.**

## **Remarque sur le fonctionnement**

Cet égaliseur est conçu pour produire l'égalisation de la pièce ainsi que le contrôle de la rétroaction et de la tonalité du système. Le réglage de l'égalisation ne peut compenser une mauvaise acoustique entre la pièce, le micro ou les haut-parleurs ni corriger le son produit par des haut-parleurs de mauvaise qualité.

Commencez toujours avec les curseurs de réglage en position 0. Evitez de trop couper de larges segments de la bande passante, ce qui limite la plage dynamique audio. Prenez soin de ne pas augmenter l'égalisation en-dessous de la mise hors circuit des haut-parleurs. La plupart des enceintes de son ne sont pas conçues pour jouer à 20 Hz et le transducteur risque d'être endommagé.

## **PANNEAU AVANT:**

### **LOW CUT (Coupeure des basses fréquences) (1):**

La coupeure des basses fréquences permet un filtrage des hautes fréquences à 40 Hz dans la position « in » (Entrée). Elle est réglée sur 12 dB par octave.

### **LOW CUT LED (DEL de coupeure des basses fréquences) (2):**

Lorsque la coupeure des basses fréquences est en position « in » (Entrée), cette DEL est illuminée, ce qui signifie que la coupeure des basses fréquences est réglée sur 12 dB par octave à 40 Hz.

### **BYPASS (Derivation) (3):**

En mode de dérivation (interrupteur enfoncé), le signal d'entrée est acheminé directement vers la sortie et n'est pas affecté par les commandes du panneau avant, sauf le filtre d'interruption basse.

### **BYPASS LED (DEL de derivation) (4):**

Cette DEL est illuminée lorsque l'interrupteur de dérivation est dans la position « in », ce qui signifie que les commandes d'égalisation et de gain sont ignorées.

### **EQUALIZER SECTION (Section d'égalisateur) (5):**

31 bandes de filtres de 1/3 octave. Les filtres sont des périphériques Q constants, situés à des fréquences centrales ISO. La plage d'égalisation est de 20 Hz à 20 kHz. Interruption ou augmentation maximum par fréquence : 12 dB.

**LED LEVEL METER (DEL du compteur de niveau) (6):**

Cette DEL à échelle multicolore indique le niveau de sortie.

**POWER SWITCH (Interrupteur d'alimentation) (7):**

Permet de mettre l'appareil sous et hors tension.

**PANNEAU ARRIERE:**



**OUTPUT (Sortie) 8:**

Lorsqu'il est utilisé avec des câbles blindés à 2 fils et des fiches stéréo (TRS) de 6,3 mm (1/4 po), le jack femelle à anneau isolé de 6,3 mm (1/4 po) (stéréo) fournit une sortie équilibrée. La sortie n'est pas équilibrée si elle est utilisée avec une fiche de téléphone mono de 6,3 mm (1/4 po).

**INPUT (Entree) (9):**

Lorsqu'il est utilisé avec des câbles blindés à 2 fils et des fiches stéréo (TRS) de 6,3 mm (1/4 po), le jack femelle à anneau isolé de 6,3 mm (1/4 po) (stéréo) fournit une entrée équilibrée. L'entrée n'est pas équilibrée si elle est utilisée avec une fiche de téléphone de 6,3 mm (1/4 po).

# DEUTSCH

**Siehe Diagramm der Frontplatte im englischen Teil des Handbuchs.**

## **Bedienungshinweise**

Dieser Equalizer ist für Raum-Equalization, Rückkopplungskontrolle und zur System-Klangregelung vorgesehen. Es ist jedoch nicht möglich, durch Equalization schlechte akustische Raumverhältnisse, eine akustisch ungünstige Anordnung von Mikrofonen und Lautsprechern oder den Frequenzverlauf eines schlechten Lautsprechers zu korrigieren.

Zu Beginn sollten sich alle Schieberegler in der Position „0“ befinden. Es ist nicht empfehlenswert, große Bereiche des Audiopaßbands zu unterdrücken, weil dies den dynamischen Umfang des Systems einschränkt. Wenn die Equalization unterhalb der Grenzfrequenz des Lautsprechersystems angehoben werden soll, ist Vorsicht geboten. Typische Lautsprecherboxen sind nicht für 20-Hz-Leistung vorgesehen, und Wandler Schäden können die Folge sein.

## **FRONTPLATTE:**

### **LOW CUT (Tiefenbegrenzung) (1):**

Wirkt in der gedrückten Position als Hochpaßfilter bei 40 Hz. Die Dämpfung der tiefen Frequenzen beträgt 12 dB pro Oktave.

### **LOW CUT LED (2):**

Wenn der Tiefenbegrenzungs-Schalter gedrückt ist, leuchtet diese LED, um anzuzeigen, daß die Dämpfung der tiefen Frequenzen 12 dB pro Oktave bei 40 Hz beträgt.

### **BYPASS (Überbrückungsschalter) (3):**

Im Bypass-Modus (Schalter gedrückt) wird das Eingangssignal direkt zum Ausgang geleitet, dabei wird es mit Ausnahme des Tiefenbegrenzungsfilters nicht von den Bedienelementen an der Frontplatte beeinflusst.

### **BYPASS LED (4):**

Diese LED leuchtet, wenn der Bypass-Schalter gedrückt ist, um anzuzeigen, daß die Equalizer- und Verstärkungsregler umgangen werden.

### **EQUALIZER SECTION (Equalizer-Abschnitt) (5):**

Das Gerät verfügt über 31 Equalizer-Bereiche mit 1/3-Oktave-Filtern. Bei den Filtern handelt es sich um „Constant-Q“-Filter mit Standard-ISO-Mitten. Der effektive Equalization-Bereich reicht von 20 Hz bis 20 kHz, maximaler Cut oder Boost pro Frequenzbereich beträgt 12 dB.

### **LED LEVEL METER (LED-Pegelanzeige) (6):**

Diese mehrfarbige LED-Kette zeigt den Ausgangspegel an.

### POWER SWITCH (Ein/Aus-Schalter) (7):

Mit diesem Schalter wird das Gerät ein- und ausgeschaltet.

### RÜCKPLATTE:



### OUTPUT (Ausgang) (8):

Eine 6,3-mm-Klinkenbuchse (Stereo) bietet bei Verwendung mit Stereoklinken und zweiadrigen abgeschirmten Kabeln einen symmetrischen Ausgang. Bei Anschluß einer 6,3-mm-Monoklinke ist der Ausgang unsymmetrisch.

### INPUT (Eingang) (9):

Eine 6,3-mm-Klinkenbuchse (Stereo) bietet bei Verwendung mit Stereoklinken und zweiadrigen abgeschirmten Kabeln einen symmetrischen Eingang. Bei Anschluß einer 6,3-mm-Monoklinke ist der Eingang unsymmetrisch.

**For further information on other Peavey products,  
ask your Authorized Peavey Dealer for the  
appropriate Peavey catalog/publication:**



**Bass Guitars  
Guitars  
Bass Amplification  
Guitar Amplification  
Sound Reinforcement Enclosures  
Microphones  
Keyboards  
DJ  
Lighting  
Mixers, Powered/Non-Powered  
Accessories/Cables  
Effects Processors  
Axxcess™ Wear  
The Peavey Beat™  
Monitor® Magazine  
Key Issues™  
Low Down™  
PM™ Magazine**



**THIS LIMITED WARRANTY VALID ONLY WHEN PURCHASED AND REGISTERED IN THE UNITED STATES OR CANADA. ALL EXPORTED PRODUCTS ARE SUBJECT TO WARRANTY AND SERVICES TO BE SPECIFIED AND PROVIDED BY THE AUTHORIZED DISTRIBUTOR FOR EACH COUNTRY.**  
Ces clauses de garantie ne sont valables qu'aux Etats-Unis et au Canada. Dans tout les autres pays, les clauses de garantie et de maintenance sont fixées par le distributeur national et assurées par lui selon la législation en vigueur.  
Diese Garantie ist nur in den USA und Kanada gültig. Alle Export-Produkte sind der Garantie und dem Service des Importeurs des jeweiligen Landes unterworfen. Esta garantía es válida solamente cuando el producto es comprado en E.U. continentales o en Canada. Todos los productos que sean comprados en el extranjero, están sujetos a las garantías y servicio que cada distribuidor autorizado determine y ofrezca en los diferentes países.

**PEAVEY ONE-YEAR LIMITED  
WARRANTY/REMEDY**

PEAVEY ELECTRONICS CORPORATION ("PEAVEY") warrants this product, EXCEPT for covers, footswitches, patchcords, tubes and meters, to be free from defects in material and workmanship for a period of one (1) year from date of purchase, PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is subject to the conditions, exclusions, and limitations hereinafter set forth:

**PEAVEY 90-DAY LIMITED WARRANTY ON TUBES AND METERS**

If this product contains tubes or meters, Peavey warrants the tubes or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase; PROVIDED, however, that this limited warranty is extended only to the original retail purchaser and is also subject to the conditions, exclusions, and limitations hereinafter set forth.

**CONDITIONS, EXCLUSIONS, AND LIMITATIONS OF LIMITED WARRANTIES**

These limited warranties shall be void and of no effect, if:

- a. The first purchase of the product is for the purpose of resale; or
- b. The original retail purchase is not made from an AUTHORIZED PEAVEY DEALER; or
- c. The product has been damaged by accident or unreasonable use, neglect, improper service or maintenance, or other causes not arising out of defects in material or workmanship; or
- d. The serial number affixed to the product is altered, defaced, or removed.

In the event of a defect in material and/or workmanship covered by this limited warranty, Peavey will:

- a. In the case of tubes or meters, replace the defective component without charge.
- b. In other covered cases (i.e., cases involving anything other than covers, footswitches, patchcords, tubes or meters), repair the defect in material or workmanship or replace the product, at Peavey's option; and provided, however, that, in any case, all costs of shipping, if necessary, are paid by you, the purchaser.

**THE WARRANTY REGISTRATION CARD SHOULD BE ACCURATELY COMPLETED AND MAILED TO AND RECEIVED BY PEAVEY WITHIN FOURTEEN (14) DAYS FROM THE DATE OF YOUR PURCHASE.**

In order to obtain service under these warranties, you must:

- a. Bring the defective item to any PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER and present therewith the ORIGINAL PROOF OF PURCHASE supplied to you by the AUTHORIZED PEAVEY DEALER in connection with your purchase from him of this product.

If the DEALER or SERVICE CENTER is unable to provide the necessary warranty service you will be directed to the nearest other PEAVEY AUTHORIZED DEALER or AUTHORIZED PEAVEY SERVICE CENTER which can provide such service.

**OR**

- b. Ship the defective item, prepaid, to:

PEAVEY ELECTRONICS CORPORATION  
International Service Center  
326 Hwy. 11 & 80 East  
MERIDIAN, MS 39301

including therewith a complete, detailed description of the problem, together with a legible copy of the original PROOF OF PURCHASE and a complete return address. Upon Peavey's receipt of these items:

If the defect is remedial under these limited warranties and the other terms and conditions expressed herein have been complied with, Peavey will provide the necessary warranty service to repair or replace the product and will return it, FREIGHT COLLECT, to you, the purchaser.

Peavey's liability to the purchaser for damages from any cause whatsoever and regardless of the form of action, including negligence, is limited to the actual damages up to the greater of \$500.00 or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. Such purchase price will be that in effect for the specific product when the cause of action arose. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. Peavey does not assume liability for personal injury or property damage arising out of or caused by a non-Peavey alteration or attachment, nor does Peavey assume any responsibility for damage to interconnected non-Peavey equipment that may result from the normal functioning and maintenance of the Peavey equipment.

**UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, ANY INCIDENTAL DAMAGES, OR ANY CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.**

THESE LIMITED WARRANTIES ARE IN LIEU OF ANY AND ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE; PROVIDED, HOWEVER, THAT IF THE OTHER TERMS AND CONDITIONS NECESSARY TO THE EXISTENCE OF THE EXPRESSED, LIMITED WARRANTIES, AS HEREINABOVE STATED, HAVE BEEN COMPLIED WITH, IMPLIED WARRANTIES ARE NOT DISCLAIMED DURING THE APPLICABLE ONE-YEAR OR NINETY-DAY PERIOD FROM DATE OF PURCHASE OF THIS PRODUCT.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE LIMITED WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THESE LIMITED WARRANTIES ARE THE ONLY EXPRESSED WARRANTIES ON THIS PRODUCT, AND NO OTHER STATEMENT, REPRESENTATION, WARRANTY, OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

In the event of any modification or disclaimer of expressed or implied warranties, or any limitation of remedies, contained herein conflicts with applicable law, then such modification, disclaimer or limitation, as the case may be, shall be deemed to be modified to the extent necessary to comply with such law.

Your remedies for breach of these warranties are limited to those remedies provided herein and Peavey Electronics Corporation gives this limited warranty only with respect to equipment purchased in the United States of America.

**INSTRUCTIONS — WARRANTY REGISTRATION CARD**

1. Mail the completed WARRANTY REGISTRATION CARD to:

PEAVEY ELECTRONICS CORPORATION  
POST OFFICE BOX 2698  
MERIDIAN, MISSISSIPPI 39302-2698

- a. Keep the PROOF OF PURCHASE. In the event warranty service is required during the warranty period, you will need this document. There will be no identification card issued by Peavey Electronics Corporation.
2. **IMPORTANCE OF WARRANTY REGISTRATION CARDS AND NOTIFICATION OF CHANGES OF ADDRESSES:**
  - a. Completion and mailing of WARRANTY REGISTRATION CARDS — Should notification become necessary for any condition that may require correction, the REGISTRATION CARD will help ensure that you are contacted and properly notified.
  - b. Notice of address changes — If you move from the address shown on the WARRANTY REGISTRATION CARD, you should notify Peavey of the change of address so as to facilitate your receipt of any bulletins or other forms of notification which may become necessary in connection with any condition that may require dissemination of information or correction.
3. You may contact Peavey directly by telephoning (601) 483-5365.



## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** When using electric products, basic cautions should always be followed, including the following.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
  - a. The power supply cord or plug has been damaged.
  - b. Anything has fallen or been spilled into the unit.
  - c. The unit does not operate correctly.
  - d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. This product should be used only with a cart or stand that is recommended by Peavey Electronics.
18. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures.

| Duration Per Day In Hours | Sound Level dBA, Slow Response |
|---------------------------|--------------------------------|
| 8                         | 90                             |
| 6                         | 92                             |
| 4                         | 95                             |
| 3                         | 97                             |
| 2                         | 100                            |
| 1 1/2                     | 102                            |
| 1                         | 105                            |
| 1/2                       | 110                            |
| 1/4 or less               | 115                            |

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss.

Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

**SAVE THESE INSTRUCTIONS!**



Features and specifications subject to change without notice.



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